



GCOS at NCDC

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GCOS Secretariat

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Things We Have Done to Improve GUAN

Direct Renovations

CBS Lead Centers for GCOS

Technical Support projects



Revitalization Activities

Equipment Replacement

Hydrogen Generators and Upper Air Systems

Gan, Maldives

Windhoek, Namibia

Yerevan, Armenia

Douala, Cameroon

Dakar, Senegal

Nairobi, Kenya

Honiara, Solomon Islands

Galapagos, Ecuador

Dar es Salaam, Tanzania

Harare, Zimbabwe

Penrhyn, Cook Islands

Antananarivo, Madagascar

Addis Ababa, Ethiopia

Bauerfield, Vanuatu

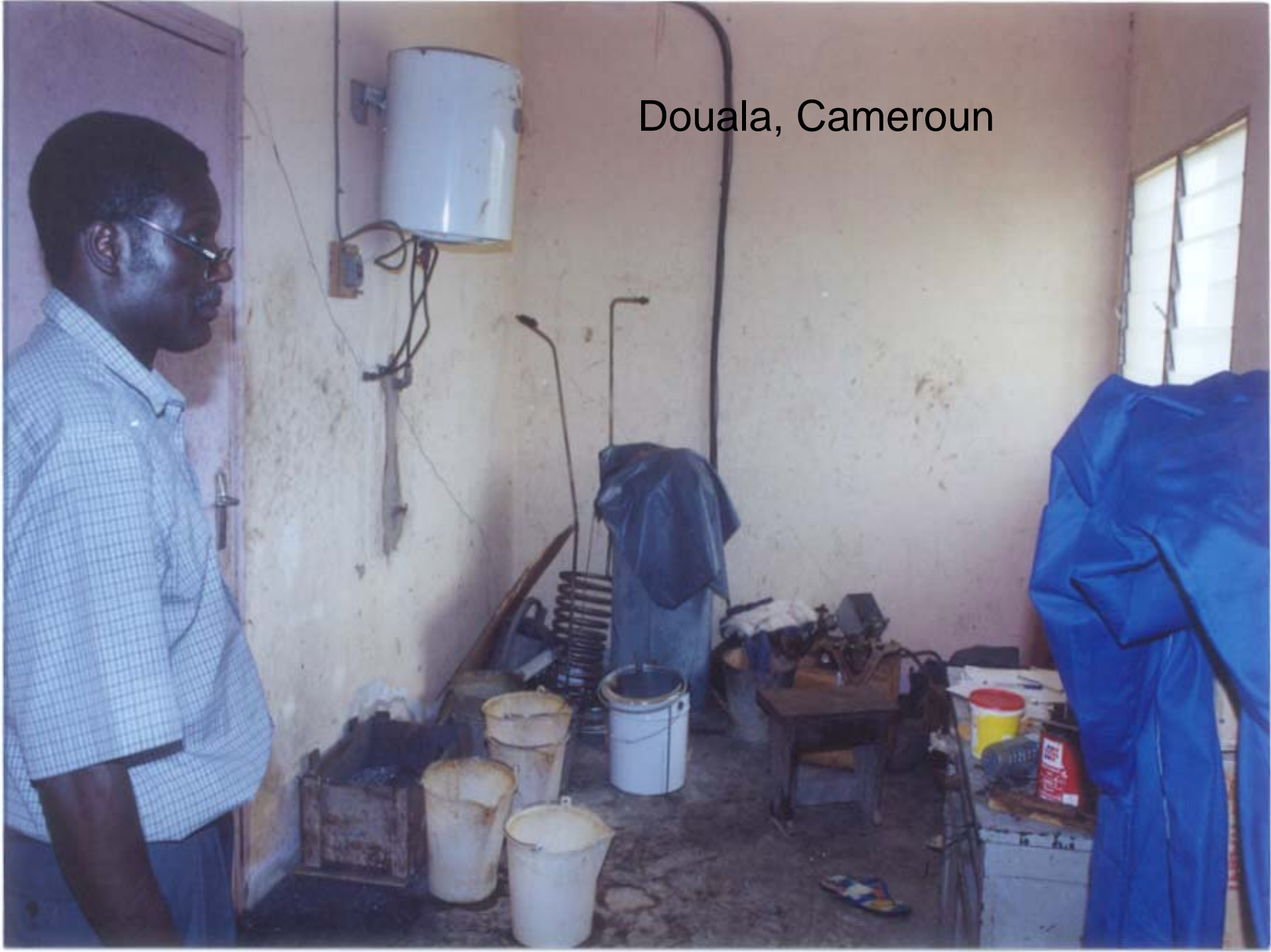
Laoag, Philippines

Radiosondes and Balloons To Many

Yerevan, Armenia



Douala, Cameroun



Antananarivo, Madagascar



GSN Renovations

Classic Instruments

Ethiopia, Central America

Mt. Bjelasnica, BIH next



The background features a globe with a blue and white color scheme. Overlaid on the globe are several text elements: 'WMO' and 'ICSU' in blue at the top, 'LOC' in blue on the left, 'UNEP' in blue on the right, 'GCOS' in red in the center, 'GLOBAL' in red on the left, 'CLIMATE' in red at the bottom left, 'OBSERVING' in red at the bottom center, and 'SYSTEM' in red on the right.

How Did We Do Them?

Bi lateral Agreements

UKMO, New Zealand, South Africa

Works Good But.....

GCOS Managed, WMO Procurement

Works Good But.....

Employed many Different Systems

CBS Lead Centers for GCOS

Have Authority to Contact Country Directly

WMO Very Formal About Contact with Members

Japanese Met Service First for GSN

Then NCDC for GSN and GUAN

Recently IRAN for GSN and GUAN

Now Australia and Morocco for GSN and GUAN



Lead Center Representatives

Hiroshi Nakamigawa

JMA

Larry Nicodemus

US

Mina Jabbari

Iran

Phil Alford

Australia

Rachid Sebbari

Morocco

Jonathan Shanklin

Antarctica

CBS Lead Centers

Initial Training Session

Good Progress Already

Iran has contacted >12 Countries

Retrieved Historic Data

See Results Already

Language, Cultural, & Regional Differences





CBS Lead Centers

Initial Recommendations

Additional Centers Needed

Africa (IGAD and SADC)

South America

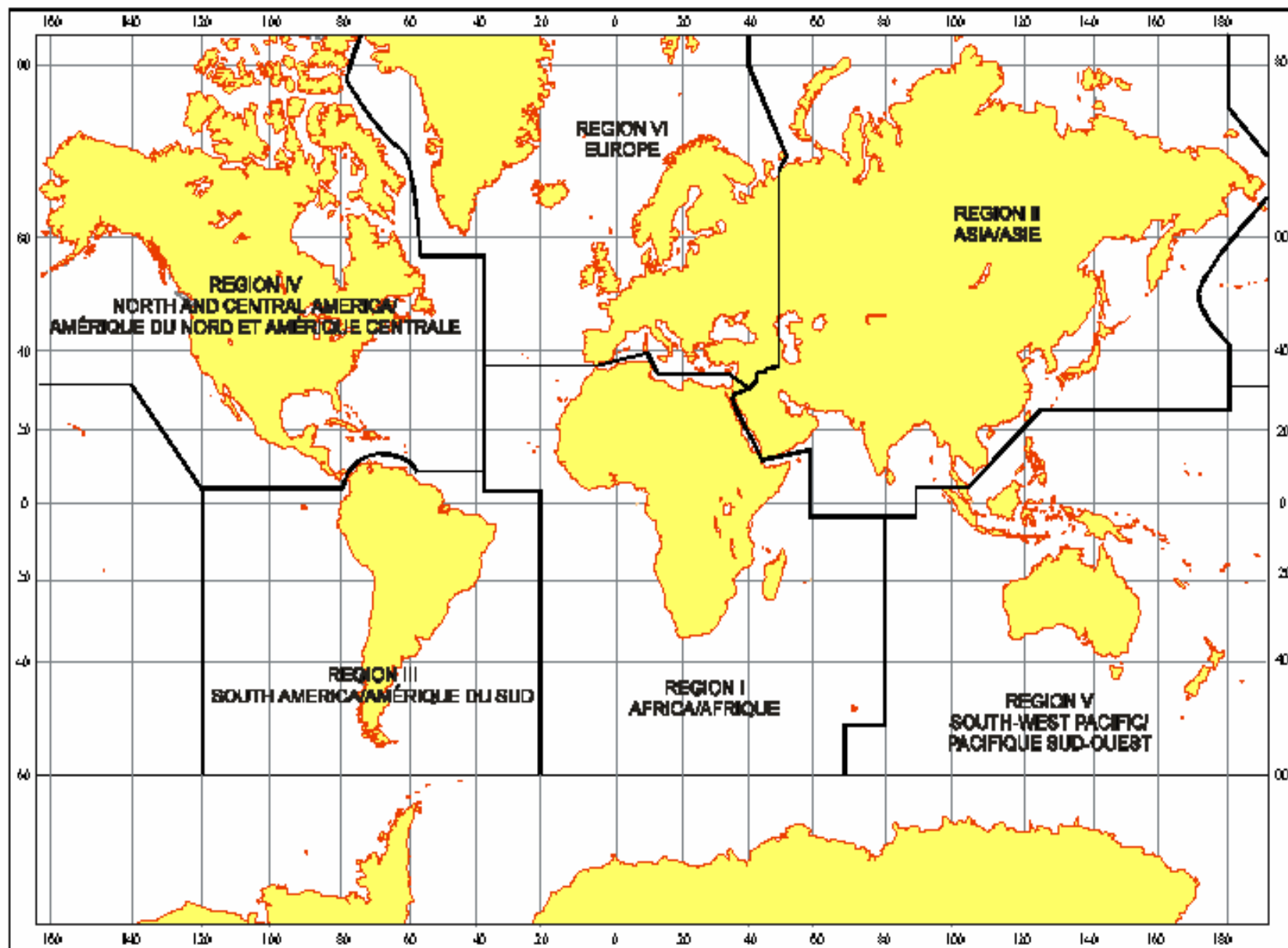
Europe

Yearly Coordination Meetings

All Centers Equal, GCOS be “LEAD”

Lead Center

WORLD MAP OF WIND REGIONS / CARTE MONDIALE DES RÉGIONS



GCOS Technical Support Projects

Three One Year Projects Established

**Pacific Islands (New Zealand Met
Service)**

Caribbean (Private Company)

SADC Africa (Botswana Met Service)

Visit Each GUAN Station 2 Times per Year

Visit as Many GSN as Possible

Monitor reports from all Stations

Technical Support Projects

Site Visits:

Better Meta Data

**Including Photos Around
Sensor Suite**

Actual Location of Many are Wrong

Many are no Longer Good Sites

Calibration and Training





Additional Initiatives

CLIMAT/CLIMAT TEMP Workshops

Russia, Casablanca, next South America

Joint with WWW, GCOS, WCP

Upper Air Observing practices

First in South America, Next in Africa

Joint WWW and GCOS

Thank You

GCOS

RKT

